

DEVELOPING LOCAL ORDINANCES TO MANAGE AND FINANCE STORMWATER PROGRAMS

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INTRODUCTION

Whether federally mandated or voluntary, municipal stormwater management programs will require a local ordinance and an appropriate funding mechanism to ensure the programs function efficiently and effectively. This paper describes key components of an ordinance to establish stormwater quantity and quality management programs as well as the issues and policy implications surrounding the ordinance elements. The paper also examines various financing options available for funding stormwater capital, operating and maintenance costs.

BACKGROUND

Legal Authorities Needed

EPA's NPDES stormwater rules require permit applications from specific categories of stormwater discharges, including municipalities with populations of 100,000 or greater. The permit application must include a description of programs designed to address water quantity and quality problems related to stormwater runoff.

To ensure local stormwater management programs are implemented properly, each applicant for an NPDES stormwater discharge permit is required to have or develop appropriate legal authority. In addition to jurisdictions with a federal mandate to acquire legal authority, local governments in Georgia may be facing water quality problems and other issues which lead them to develop stormwater management programs. It is recommended that any local government with a stormwater management program, regardless of the impetus behind the program's development, address measures to conduct the following:

1. Control discharge of pollutants from and quality of stormwater discharged from industrial sites to the local government storm sewer system;
2. Prohibit illicit discharges to the local storm sewer system;
3. Control spilling, dumping or disposal of non-stormwater materials to the local storm sewer system;
4. Control contribution of pollutants from other

municipalities to the local storm sewer system.

5. Require compliance with the conditions in any legal documents for control of stormwater; and
6. Carry out inspection, surveillance and monitoring procedures necessary to determine compliance with legal documents controlling stormwater in the municipal storm sewer system.

Because stormwater programs may require significant financial outlays in terms of both one-time, capital costs and ongoing, operating and maintenance costs, NPDES permit applicants must include a fiscal analysis. This analysis should include a description of proposed funding sources to meet necessary expenditures, and legal restrictions on the use of such funds. It is likely local governments will need to address both the establishment of specific funding sources and the legal restriction requirement in some form of local ordinance.

Ordinance Development Method

In determining key elements of a basic stormwater management ordinance, the Atlanta Regional Commission (ARC) staff first reviewed existing laws and regulations related to stormwater issues. These materials included ordinances targeted at controlling water quantity and quality in local governments from all regions of the country, as well as several already adopted within the state of Georgia.

Based on this research, a preliminary outline of a basic ordinance was drafted. This draft outline included minimum provisions necessary to meet NPDES legal authority requirements. ARC staff then convened a stormwater legal authority study group comprised of representatives from across the state who are facing NPDES requirements or developing stormwater programs voluntarily. The study group discussed goals and objectives of stormwater ordinance design, as well as local governments' needs and resources. The group reviewed the preliminary outline and provided comments, which included input from local government attorneys. Based on the results of this process, a basic model stormwater management ordinance was developed. The following discussion describes key provisions of that ordinance.

ELEMENTS OF A BASIC MODEL ORDINANCE TO MANAGE STORMWATER PROGRAMS

Authority

The authority of any new stormwater ordinance, established as a new chapter to the local government's code of ordinances, city charter, etc., is based on home rule provisions of the Georgia Constitution, Article IX, Section II, Chapter 2-49. These provisions state that counties and cities have legislative power to adopt ordinances relating to their property which are not provided for in general law and are consistent with both the State Constitution and other local laws.

Findings

This section helps define the need for the ordinance. A description of adverse impacts on the environment from mismanagement of stormwater runoff is appropriate to include. These findings are simply the potential impacts of uncontrolled stormwater runoff; it is not necessary to prove they all occur prior to enforcing provisions of the ordinance. Issues to incorporate include a list of potential impacts of pollutant and nutrient loadings, effects on flooding incidence, and potential economic losses. It is recommended that a statement be included that every parcel of real property either uses or benefits from the maintenance of the local stormwater system be included.

Objectives/Purpose

This element will enhance public and judicial understanding of the ordinance and related control provisions. Because local governments will have varying programs in terms of both scope and basic intent, this section of the ordinance will be very jurisdiction-specific and will require some key decisions. Protecting, maintaining and enhancing short-term and long-term public health, safety, and general welfare are standard items to include. However, jurisdictions must decide if achieving these objectives will include regulation and management of facilities on private, as well as public property. In addition to meeting the objectives outlined in the NPDES regulations, NPDES permit applicants should highlight the fact that the provisions of the ordinance are required by the state and federal government. Those local governments not required to obtain an NPDES permit need not include this specific element component.

Definitions

Depending on a local government's conventional practices on ordinance definitions, this section could include a discussion of general words or phrases (eg. "shall" and "may") interpreted so as to give them the meaning they have in common usage or in other local government codes. In addition, the ordinance should define pollution and water quality-related terms, as well as service area and facility-related terms. Cross referencing

existing ordinances such as erosion and sedimentation, nuisance, sanitary sewer and other applicable ordinances throughout the stormwater ordinance can also help clarify terms as well as the stormwater ordinance's role in protecting the public health, safety and welfare.

Scope of Responsibility

In addition to a general statement that the provisions of the ordinance will apply throughout the corporate/other area of the local government, this section should describe the organizational arrangements specific to an individual government's stormwater management program. For example, if interdepartmental arrangements exist, the responsibilities of each department or agency should be described here. Similarly, if a separate stormwater management agency/utility is to be established, this section should describe its creation and responsibilities. ARC's model ordinance includes very broad language in describing responsibilities and states further that the provisions shall be considered minimum requirements and not a limitation or repeal of any other local government powers under State statute.

Powers of (Department/Agency)

Elements included in this section do not represent duties the government must undertake, but rather powers it may assume as its stormwater management program evolves over time. The power to administer and enforce regulations and procedures, including the right to seek injunctive relief and seek penalties for violation of the ordinance, should be outlined here. Additional powers include the ability to administer, coordinate and oversee various planning, acquisition, maintenance and other activities necessary to manage the local stormwater system.

Prohibition

This section is key to ensuring the local government has control over what substances enter its stormwater system. These provisions should state it is unlawful to throw, drain, run, or otherwise discharge anything but storm or unpolluted surface water to public streets, highways, rights-of-way, stormwater conveyances or facilities, or other property that drains to the storm sewer system. Because this wording is rather broad, it is important, for implementation purposes, to include provisions exempting certain discharges from this prohibition. Examples include cooling water, water line flushing, diverted stream flows, uncontaminated pumped groundwater, discharges from potable water sources, foundation drains, air conditioning condensation, individual residential car washing, etc.

Illicit Connections

This provision prohibits connection of facilities, etc. that discharge anything except stormwater or unpolluted water to the local government's stormwater system. The

government should include a statement that improper connections must be disconnected and redirected, if necessary, to the sanitary sewer system, upon approval of that system's Director.

Maintenance

Depending on local policies regarding maintenance of stormwater facilities on private property, allocation of maintenance and ownership responsibilities between the private and public sector may vary considerably from jurisdiction to jurisdiction. It is extremely important to delineate these responsibilities clearly within the ordinance. Provisions stating private owners must grant perpetual easements for maintenance access should be included.

Inspection

Rules for inspection of private property, both for regular maintenance and emergency purposes, should be explained clearly in the ordinance. Local governments should also include a description of procedures in the event an inspection reveals a danger to the public health, safety or general welfare.

Penalties

Jurisdictions should provide for sufficient detail and notice of the nature of alleged violations. The ordinance should include a maximum dollar penalty, as well as the maximum period of time a violator may be incarcerated for violation of the ordinance. Provisions should also be included which allow for an accused violator to request a hearing within a given period of time.

Variances from Requirements

This section allows the Director discretion to grant a variance from ordinance requirements under "exceptional circumstances." (unnecessary hardship, etc.).

Appeals

This section sets up an appeals process which includes a hearing by an appeals authority which is separate from the department/agency implementing and enforcing provisions of the management ordinance. In small communities, the governing body, such as a city or town council, may serve in this capacity. Other communities may establish a specific stormwater appeals board. If an Appeals Board is the preferred format, the local government may use the stormwater ordinance as a vehicle to establish the board. Alternatively, the appeals board, along with its rules and procedures, could be established through a separate ordinance. If the latter approach is taken, the local government may wish to cross reference the ordinance establishing the appeals board.

Cooperation With Other Governments

This section should state simply that the local government may enter into interlocal agreements to carry out the purpose of the ordinance. A list of potential agreements may be included, but the government should make clear the list is not exhaustive, and the need to adopt other agreements may arise.

STORMWATER PROGRAM FUNDING OPTIONS

The following discussion represents a list of potential funding sources to finance stormwater management programs. A jurisdiction's budget may include a combination of the sources below, plus any other special options available to that government. The various components of an overall plan may be funded most appropriately through different mechanisms. As financial requirements change over a program's lifetime, various funding options should be reevaluated to determine those most appropriate for a given phase.

In addition, each funding mechanism will have different implementation requirements. Application of user fees, development fees and special assessments will require adopting funding provisions either within the management ordinance or in a separate stormwater funding ordinance. Alternatively, use of debt financing and the general fund are likely covered in a local government's charter.

Debt Financing

Debt financing of capital and operation and maintenance (O&M) costs can be accomplished through issuing general obligation bonds, revenue bonds, or a combination of the two generally referred to as "double barrel bonds." A bond issue requires voter approval on a referendum ballot and is subject to local administrative policy in the form of "debt ceilings." Most stormwater debt has been financed through issuance of 15-year term bonds. Revenue bonds issued specifically for stormwater facilities may not be an option until a government has established a user fee history, since these bond issues would be retired through user fee revenues.

Debt financing allows utilities to distribute the costs of capital improvements over several years, thereby lowering the initial annual cost, allowing construction to occur sooner, and allocating the cost burden to both current and future users. O&M costs can also be included in some bond issues. However, because flexibility in use of the revenues is limited, and costs of issuance, interest and dividends increase total program costs, bond issues are not well suited to funding on-going management program expenses such as monitoring and public education programs.

State Revolving Loan (SRF) and Georgia Environmental Facilities Authority (GEFA) Programs

While no stormwater projects have yet been financed

through either of these Georgia programs, stormwater projects do qualify for the SRF program under the Federal Clean Water Act Amendments of 1987. (The State revolving fund program was established to replace the Federal Wastewater Treatment Construction Grants Program.) Discussions with GEFA staff indicate qualifying under their program will not likely require any additional legislation. EPA's National Financial Advisory Board recommends funding for any water-related projects should be done through SRF programs and is working to extend federal funding for the program to 1999, five years beyond the scheduled termination date of 1994. GEFA provides the 20% match requirements in the SRF program. While both programs have advantages and disadvantages similar to those associated with other forms of debt financing, obtaining loans through these State programs can achieve significant savings in interest and overhead costs.

General Fund

A jurisdiction's general fund may, depending on the fiscal health of the community, represent a large pool of money with a stable funding source - local taxes, miscellaneous revenues, and any funding from outside sources. In order to obtain funding for stormwater programs through this source, a jurisdiction has essentially two options available: reduce funding for existing programs and departments, or raise taxes.

A government which elects to use its general fund must either subject its stormwater operations to budget deliberations each fiscal year or opt for the politically unpopular tax increase. Where stormwater programs handle runoff problems related to roads and streets and/or are responsible for maintenance of drainage within street rights-of-way, transfers from the local road/street funds may be viable alternatives. Nonetheless, depending on the status of existing facilities, any of these options could prove particularly difficult in the early, capital-intensive stage of the stormwater program when either large withdrawals from the general fund or large tax increases would be necessary.

User Fees/Stormwater Utility

User fees present an alternative to increased taxes to recover capital and O&M costs. Due to the high initial capital costs required for development of some programs, additional start-up funding sources may be necessary. However, use of these fees may help make revenue bonds a more viable option. Similar to water and wastewater rates, stormwater fees are assessed on "users" of the system based on average conditions for groups of customers with similar service requirements.

Typically, fees are based on some measure of a property's impervious area, using the average single family residence as a reference point. Alternative methodologies include use of a runoff factor or coefficient based on the

type or category of land use, a flat fee per customer which is the most simple to administrate, and a combination of any of these methods. Some utilities use the flat fee to cover administrative, accounting, and planning costs and one of the other methods to finance maintenance and capital requirements.

Depending on the size and administrative resources of a stormwater utility, customer bills can be assessed either alone or in conjunction with other utility bills such as those of the water, wastewater and electric departments. The intent of adopting these fees, which may require significant public education efforts to receive approval, is to make the stormwater utility an enterprise fund, that is, self-supporting.

Development Fees

Utilizing this funding source would require assessing a fee, based on any of the parameters mentioned above, on developers of new projects within a proposed basinwide system area. This assessment is, in effect, an "impact fee" in which a project's share of total costs is determined not by the benefits received but by the impact it creates in requiring new facilities and/or increased service levels. These are generally one-time fees which may be collected when site construction permits are issued. Revenues from these fees are used specifically to finance new facilities or other system components and are not usually used to cover annual maintenance costs.

One consideration in levying these charges is the need to credit developers for installing, via appropriate permits and approved plans, runoff control measures. The reduction in charges should be proportionate to the reduction in runoff.

Development fees provide an immediate, up-front source of cash to fund capital projects as they become necessary. However, this funding source may not be appropriate for highly developed areas, as the funding mechanism does not provide for recovery of costs from existing development. In addition, the Georgia Development Impact Fee Act requires that a jurisdiction have an approved comprehensive plan, complete with capital improvements element, before it can levy impact fees of any type. If these requirements are met, development fees may be a good supplemental primary revenue source but are not well suited to use as a primary revenue source.

Special Assessments/Tax Districts

A jurisdiction may create special assessment or tax districts to develop runoff control systems. This approach is good in cases where capital improvements, special studies, and/or extraordinary maintenance benefits a specific area or number of properties. The result is only those who benefit from the systems pay for them. Special tax districts function as quasi-municipal corporations with an independently elected board, while special assessment districts may be under control of the local government.

These districts have several funding options available: special taxes on property within the district area, development fees, user fees, and in some instances, debt financing. Creation of these districts requires voter approval. An alternative to creating special districts is to develop basin-specific user fees through a stormwater utility.

SUMMARY

The ease with which a local government implements its stormwater management program will depend to a large degree on the legal authority the jurisdiction obtains through its stormwater management and funding ordinances. The key elements of ARC's model ordinance described above help address water quality and quantity issues related to discharges to a local stormwater system. They can stand alone as components of a separate stormwater management ordinance or be incorporated with Erosion and Sedimentation, Nuisance and other ordinances as part of a more comprehensive environmental ordinance.

LITERATURE CITED

- Official Code of Georgia Annotated, Title 2, Constitution of the State of Georgia.
- Official Code of Georgia Annotated, Titles 45-12-200 et seq.; 50-8-1 et seq.; 12-2-1 et seq.; and 36-70-1 et seq., 1989 Georgia Planning Act.
- 40 CFR Parts 122, 123 and 124, National Pollutant Discharge Elimination System Permit Application Regulations for Storm Water Discharges.
- Rules of Georgia Department of Natural Resources Environmental Protection Division, Chapter 391-3-15 Rules for Environmental Planning Criteria.
- Title II Amendments to the Clean Water Act of 1987, Title VI, Section 603, Water Pollution Control Revolving Loan Funds.